Onouris

Long Distance Converter

User's Manual

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INFORMATION FOR THE USER

This device complies with part 15 of FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions contained in this manual, may cause harmful interference to radio and television communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that of the receiver
- Consult the dealer or an experienced audio television technician

NOTE: Connecting this device to peripheral devices that do not comply with CLASS A requirements or using an unshielded peripheral data cable could also result in harmful interference to radio or television reception. The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

EMC:
Onouris complies with the following specifications:
CENELEC EN 55103-1
CENELEC EN 55103-2 (E4 Environment)

Contacting Merging

For all general or sales inquiries:

In Europe, contact our Sales Office:
Tel: +44 1763 849 356 or Fax +44 1763 849 282

In the U.S., contact our Illinois Office:
Tel: 1-847-272-0500 or Fax: 1-847- 272-0597

e-mail: info@merging.com

All bug reports or suggestions for improvement can be directed to: bugs@merging.com

All documentation inquiries can be directed to: docs@merging.com

Onouris Warranty Information

This product is warranted to be free of defects in materials and workmanship for a period of one year from the date of purchase. This Limited Warranty is extended by Merging Technologies, Inc. to the original purchaser.

In the event of a defect or failure to confirm to this Limited warranty, Merging Technologies, Inc. will repair or replace the product without charge within one year. In order to make a claim under this limited warranty; the purchaser must notify Merging Technologies, Inc. or their representative in writing, of the product failure. In this limited warranty the customer must upon Merging Technologies, Inc. request, return the product to the place of purchase, or other local designation, for the necessary repairs to be performed. If the consumer is not satisfied with the repair, Merging Technologies, Inc. will have the option to either attempt a further repair, or refund the purchase price.

This warranty does not cover: (1) Products which have been subject to misuse, abuse, accident, physical damage, neglect, exposure to fire, water or excessive changes in the climate or temperature, or operation outside maximum rating. (2) Products on which warranty stickers or product serial numbers have been removed, altered or rendered illegible. (3) The cost of installations, removal or reinstallation. (4) Damages caused to any other products.

Introduction

The Onouris Long Distance Converter allows users of optical Toslink (ADAT, optical S/PDIF) equipped devices to drastically increase the distance of optical cable runs.

Plastic Fiber optical cables have a distance limitation of 10 meters. In today's market, this 10 meter distance limitation causes many problems where Toslink devices such as computers and ADAT units need to be installed outside the control room due to fan noise.
Onouris allows these optical cable runs to be extended up to 600 meters, even up to 1000 meters, with a small, internal resistor change. Onouris solves these problems by converting from a plastic fiber cable system to glass optical cable system.

On the front panel of Onouris, there are two sets of three optical connectors, one set converting from one Glass Optical cable input to two Plastic Fiber outputs in parallel. The other set converting from one Plastic Fiber input to one Glass Optical output and one Plastic Fiber output in parallel.

Other features include:

- No switches, no complexities, just a Power LED to indicate proper operation system with a built-in universal 110-220V power supply.
- Two units would normally be required for a complete system.
- Onouris fully supports Softimage DS Dual Stream Systems, Yamaha 02 and 03 consoles, Panasonic DA-7 console, Optical S/PDIF compliant devices, Alesis ADATS, and any other ADAT optical compliant devices.
- Can also serve as an Optical Distribution Amplifier
- Merging can also supply Glass Optical cables in either 20 meter or 50 meter lengths and longer custom lengths built to order.

Getting Started

The simplicity of Onouris allows it to be quickly integrated into any new or existing configuration.

Onouris Front Panel

The front panel contains the power on indicator as well as the input and output optical connectors.

Power Indicator

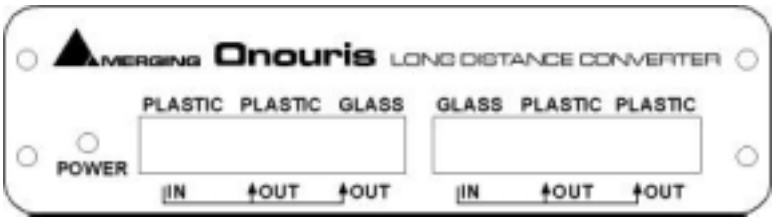
When lit, this indicates that the unit is plug-in and functional.

Plastic Fiber Input

The plastic fiber output from the desired ADAT device is plugged into the PLASTIC IN connector. A glass fiber cable can then be plugged into the GLASS OUT connector and run the desired length to another Onouris unit (if glass to plastic conversion is required). Note that a PLASTIC OUT connector is also available which is basically a loop of the PLASTIC IN connector.

Glass Fiber Input

The glass fiber output from another Onouris unit is plugged into the GLASS IN connector. A plastic fiber cable can then be plugged into the ADAT optical compatible device. Note that a GLASS OUT connector is also available which is basically a loop of the GLASS IN connector.



Onouris Rear Panel

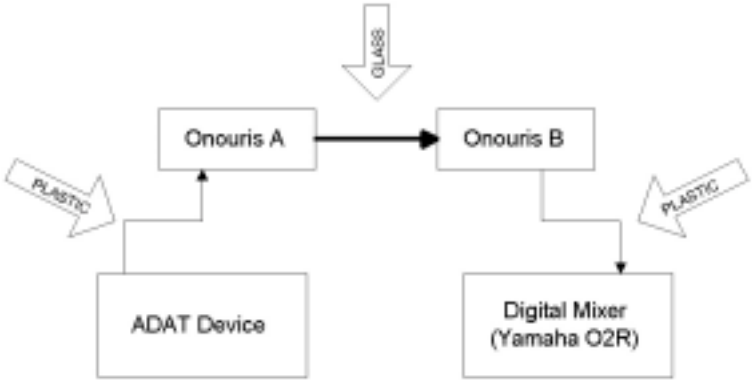
Power Connector

Onouris is designed with a built-in universal power supply that accepts AC from 100 to 250 volts, 50-60 Hz.

Typical Connection Scenarios

ADAT Cable Extension

This example demonstrates how two Onouris units can be used to extend the connectivity length of an ADAT device

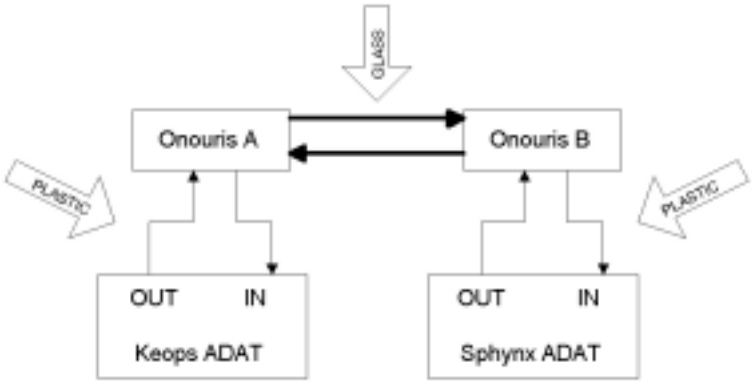


Description

- Plastic Fiber Optical cable is used from the ADAT device then connected to the PLASTIC IN on the first Onouris unit
- Glass Fiber optical cable is connected from GLASS OUT on the first Onouris unit.
- The Glass fiber is run to the location of the second Onouris unit then connected to the GLASS IN.
- Plastic Fiber is then connected to from the PLASTIC OUT on the second unit. In this case, the ADAT in of the Yamaha 02R.

SOFTIMAGE |DS ADAT Cable Extension

This example demonstrates how two Onouris units can be used to extend the bi-directional connectivity length of a SOFTIMAGE |DS system and an external Audio converter.

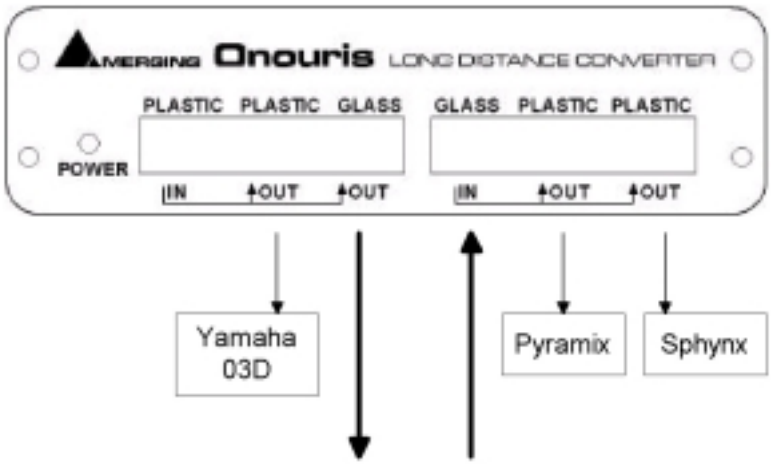


Description

- Plastic Fiber Optical cables are used from the Keops ADAT IN/OUT then connected to the PLASTIC IN and the second PLASTIC OUT on the first Onouris unit
- Glass Fiber optical cable is connected from GLASS OUT and GLASS IN on the first Onouris unit.
- The Glass fiber cables are run to the location of the second Onouris unit. Connections are made to the GLASS OUT and GLASS IN on the second Onouris unit.
- Plastic Fiber Optical cables are used to/from the Audio Converter (such as Sphynx) using the ADAT IN/OUT then connected to the PLASTIC IN and the second PLASTIC OUT on the second Onouris unit

Optical Distribution Amplifier

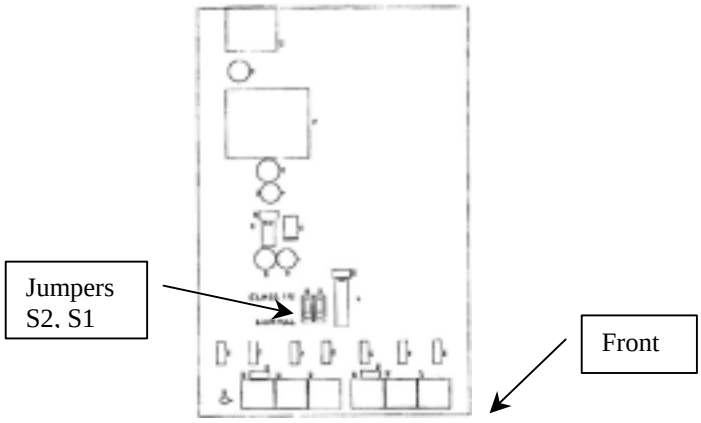
This example demonstrates how a single Onouris unit can be used as an Optical Distribution Amplifier. The internal switches need to be changed from their default setting in order to allow this functionality. See the “Internal Switch Settings” section for more information.



- A source is fed into the GLASS IN
- Redistributed signals are then sent to the GLASS OUT and the 3 PLASTIC OUT connectors

Internal Switch Settings

Once the Unit has been carefully opened, two internal switches provide configuration options for Onouris. These switches can be changed to set the Optical Distribution Amplifier features within Onouris.



The above picture shows the internal printed circuit board and the location of the two switches.

Switch S1and S2 have the following functions:

S1 to rear position: This is the normal operation (default ex-factory). The PLASTIC OUT (second connector from left) loops the signal present at the PLASTIC IN Input (first connector from left).

S1 to front position: PLASTIC OUT (second connector from left) loops the signal present at the GLASS IN Input (fourth connector from left). This signal is also sent in parallel to the 2 PLASTIC OUTPUTS (fifth and sixth connector from the left).

S2 to rear position: This is the normal operation (default ex-factory). The GLASS OUT (third connector from left) loops the signal present at the PLASTIC IN Input (first connector from left).

S2 to front position: The GLASS OUT (third connector from left) loops the signal present at the GLASS IN Input (fourth connector from left) This signal is also sent in parallel to the 2 PLASTIC OUTPUTS (fifth and sixth connector from the left).

The above configuration would allow some users with specific requirements to "mirror" the signal present at the GLASS IN connector to up to 4 parallel outputs (instead of only the 2 default outputs). This configuration would allow a single Onouris unit to be used as an “Optical Distribution Amplifier".

Technical Specifications

Size: 170 mm * 112 mm * 31 mm (L * W * H)
Weight: 0.5 kg
Power Consumption: 1 VA

Maximum length (glass fiber): 600 meters (1 km with internal resistor change). If you require this resistor change, please contact Merging Technologies for more information.

Maximum recommended length (plastic fiber): 10 meters

Supports following signal formats:
- ADAT (8 channel)
- S/PDIF Optical (2 channel)